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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/776,706	02/06/2001	Young-min Cheong	1293.1169	5368

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EXAMINER	
TRAN, THANG V	

ART UNIT	PAPER NUMBER
2653	

DATE MAILED: 07/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/776,706	CHEONG ET AL.	
	Examiner	Art Unit	
	Thang Tran	2653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *07 May 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-32* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *1-6 and 27-32* is/are allowed.

6)☒ Claim(s) *7, 12-19 and 26* is/are rejected.

7)☒ Claim(s) *8-11 and 20-25* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The communication dated 05/07/04 has been considered with the following results:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Park et al (US 5,793,407).

Park et al., according to Figs. 3 and 4, show an optical apparatus comprising: a slider (6); an actuator assembly (7,8) pivotable in a radial direction of an optical disk, supporting the slider (6); and an optical pickup (14) for focusing a light beam from a light source to form a light spot on the recording surface of the optical disk, where the optical pickup including a light source (1), an optical path changing unit (15) ; an objective lens (see column 3, lines 58-67), a photodetector (17), and at least an optical fiber (16) connecting the light source and the optical path changing unit (15) thereby the optical loss between the light source and the optical path is suppressed due to the use of the optical fiber, as recited in claim 7.

3. Claims 7, 12, 19 and 26 are rejected under 35 U.S.C. 102(5) as being anticipated by Jordache et al (US 6,288,985).

Jordache et al., according to Figs. 1-22, show an optical apparatus (see Figs. 1, 4-6 as example) comprising: a slider (292); an actuator assembly (see Fig. 1 , 21 or 22 as example) pivotable in a radial direction of an optical disk, supporting the slider; and an optical pickup (see 280 in Fig. 4) for focusing a light beam from a light source to form a light spot on the recording surface of the optical disk, where the optical pickup including a light source (282 in Fig. 4), an optical path changing unit (376 in Fig. 6) ; an objective lens (378 in Fig. 6), a photodetector (302 in Fig. 4), and at least an optical fiber (209) connecting the light source and the optical path changing unit (376) thereby the optical loss between the light source and the optical path is inherently suppressed due to the use of the optical fiber, as recited in claim 7.

Regarding claim 12, see Figs. 1 and 18 which show an optical system comprising: an actuator arm (716) pivotable in a radial direction of an optical disk; a load beam (746, 722) support by the actuator arm (716) and having a first end movable in the radial direction (751) relative to a movement of the arm; and a slide element (724) having an objective lens (725) attached to the load beam, and the slide element movable over a recording surface of the optical disk, as recited in claim 12.

Regarding claim 19, see an optical pickup (108 in Fig. 1 mounted on an actuator arm) comprising (see Fig. 4 for details) a light source (282); photodetector (302); an optical path changing unit (376 in Fig. 6); and an optical fiber (296) connecting the light source and the optical path changing unit (376) as recited in claim 19.

Regarding claim 26, see Fig. 1 and 6 comprising: an actuator assembly (see Fig. 1) pivotable in a radial direction of an optical disk for supporting a slider (100 or 292); and an optical pickup (see 108 in Fig. 1 mounted on an actuator arm) comprising (see Fig. 4 for details)

a light source (282); photodetector (302); an optical path changing unit (376 in Fig. 6); and an optical fiber (296) connecting the light source and the optical path changing unit (376) as recited in claim 26.

4. Claims 12-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Fukakusa (US 5,615,203).

Fukakusa, according to Figs. 12-13 and 20, shows an optical system comprising: an all features of the instant claimed invention as interpreted

Regarding claim 12, see Figs. 10-13 and 20 which show an optical system (see Fig. 12 as example) comprising: an actuator arm (90, 66) pivotable in a radial direction of an optical disk (see Fig. 20 for details of the actuator arm); a load beam (80) support by the actuator arm (90,66) and having a first end movable in the radial direction relative to a movement of the arm (90, 66); and a slide element (30) having an objective lens (20) and attached to the load beam (80), and the slide element movable over a recording surface of the optical disk, as recited in claim 12.

Regarding claims 13 and 14, see the driving unit including magnet 56 mounted on the end of the actuator (90, 66) and coil 62 mounted on the end of the load beam (80).

Regarding claim 15, see Fig. 12 which shows the load beam (80) having a second end fixed to a second end of the arm (90, 66); and intermediate region located between the first and second end of the load beam is flexible (see spring 87) so as to enable the movement of the first end of the load beam in the radial direction relative to the arm (90,66).

Regarding claim 16, see Fig. 12 which also shows the intermediate region comprising a pair of extensions (this can be either springs 84 or 87) separated by a gap from each other, connecting facing edge of the first and second end of a load arm.

Regarding claims 17 and 18, see the rejection applied to claims 15 and 16 above.

Allowable Subject Matter

5. Claims 8-11 and 20-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. Claims 1-6 and 27-32 are allowed.

Response to Arguments

7. In response Applicant's arguments filed 05/07/04, Applicant 's attention is drawn to Fig. 12 of Fukakusa and its respective disclosure which show that spring (87) interpreted as part of a load beam (or an intermediated region as recited in claim 15) is moveable in a radial direction relative to the arm actuator (90) when tracking operation is performed. The spring 87 must move in the radial direction in order to move an objective lens when tracking operation is performed. The tracking operation cannot be performed if the spring 87 does not move in the radial direction. Accordingly, Fukakusa does teach the use of a load beam moveable in the radial direction.

Also, Applicant should note that Park does teach the use of an optical pickup including a light source, but the light source is not mounted on an arm actuator. However, since claim 7 does not recite where an optical pickup or a light source is mounted, limitation related to

location or mounted position of the light source cannot read into the claim for the purpose of avoiding the prior art.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thang V. Tran whose telephone number is (703) 308-1551. The examiner can normally be reached on Tuesday to Friday, from 7:30AM to 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (703) 305-6137. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Thang V. Tran
Primary Examiner
Art Unit 2653